

Title:

The Relation of Absolute and Comparative Cancer Risk Perceptions to Cancer Worry: Findings from the Health Information National Trends Survey I

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Research Questions

1. Is worry about cancer a function of high absolute risk perceptions, high comparative risk perceptions, or both?
2. Does the relationship between risk perceptions (absolute and comparative) and worry differ across different types of cancer?
3. Does past history of cancer or psychological distress moderate the relationship between risk perceptions on worry?
4. Are there gender differences in the extent to which absolute and comparative risk perceptions are related to cancer worry?

Study Description/Rationale

Several studies show that cancer risk perceptions and worry are related (see McCaul & Mullens, 2003). Our aim is to address how two different types of risk perceptions for cancer are related to cancer worry. The standard method of eliciting risk perceptions is by asking respondents to estimate their risk on an absolute scale, so that higher responses represent higher perceived risk. However, another method is to ask individuals whether their risk is higher, lower, or the same as that of other people – which we call comparative risk perception. The latter method is based on the notion that people judge their standing on many dimensions by engaging in social comparisons with others (Festinger, 1954). Recent work suggests that absolute and comparative risk perceptions each explain an independent portion of the variance in cancer worry (e.g., Lipkus et al., 2000). Two studies experimentally manipulated perceived comparative risk and reported significant effects on worry independent of absolute risk (Klein, 1997; McCaul et al., 2003). To date, however, no studies have addressed these issues in a large, representative sample, or in a context in which risk perceptions are assessed for more than one type of cancer. Small sample sizes have also precluded an examination of whether key demographic variables such as gender or past history of cancer might influence the relationship between worry and the two types of risk perceptions.

Variable List

cc1chanc
cc2relat
cc3freqw
bc1chanc
bc2relat

bc3freqw
pc1chanc
pc2relat
pc3freqw
spgender
ch1everh
distre_a

Method of Analysis

For each of three cancers (prostate, breast, and colon), we will correlate absolute and comparative risk perceptions with worry. Regression analyses will also be used to determine whether both types of risk perceptions predict worry independently. In these regressions we will also assess whether the associations between risk perception and worry are moderated by sex, personal history with cancer, and psychological distress, and we will examine differences in effect sizes to determine the relative influence of absolute and comparative risk perceptions.

References

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Targeted Journals

Journal of Risk and Uncertainty; Cancer Epidemiology, Biomarkers and Prevention; Risk Analysis; Journal of Worry Research